# EXECUTIVE SUMMARY

## ASX CLEAR OPERATING RULES

Risk Based Capital Requirements

FEBRUARY 2025

| DOCUMENT VERSION | DATE | REASON FOR AMENDMENT |
|---|---|---|
| 1.0 | March 2004 | Introduction of ASX and ACH Rules |
| 1.1 | November 2007 | Addition of contact details & minor amendments |
| 1.2 | November 2008 | Change of business unit name (from Prudential Risk Management to Capital Monitoring) and change of contact details |
| 1.3 | January 2009 | Change of minimum core liquid capital requirements for ACH Participants |
| 2.0 | January 2010 | Core capital rule amendments and updated contact details. |
| 2.1 | August 2010 | Updated for new ASX company names and rules. |
| 2.2 | August 2011 | References to ASX Ltd, ASX Rules & Rule S1A removed (after transfer to ASIC) |
| 2.3 | January 2012 | Core capital rule amendments and updated contact details |
| 2.4 | March 2012 | Change of team name (from CM to CRA). |
| 2.5 | May 2014 | Deletion of bank guarantees, add CRA email and phone contact details |
| 2.6 | August 2014 | Tiered core capital requirements |
| 2.7 | March 2017 | Removal of use of cash and approved subordinated debt for meeting the core capital requirement |
| 2.8 | January 2018 | Updated for the new minimum core capital requirements approach and amended core capital and liquid capital definitions |
| 2.9 | February 2025 | Updated for implementation of single capital measure |

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## I. INTRODUCTION

The calculation of the risk based capital requirements under ASX Clear Operating Rule Section 5 and in Schedule 1 ("Rule S1") is separated into two distinct components:

1. a measure of total regulatory capital - "liquid capital"; and
2. a measure of risk in the organisation, which could either be "core requirement" or "total risk requirement".

This Executive Summary provides a brief overview of the calculations that Participants will be required to perform to ensure that they comply at all times with Rule S1.

A Participant Impact Table is provided at the end of this paper.

Before a Participant can commence clearing it must demonstrate to ASX Counterparty Risk Assessment that it can comply with the requirements of Rule S1.

## II. MINIMUM CAPITAL REQUIREMENTS

For a Participant that is not a dual capital participant, its liquid capital must at all times be greater than its liquid capital requirement. Liquid capital requirement is the maximum of the Participant's core requirement and total risk requirement.

For a Participant that is a dual capital participant, its liquid capital must at all times be greater than its total risk requirement and its core capital must at all times be not less than its core requirement.

A dual capital participant is a Participant that has been approved as such by ASX Clear. Certain criteria must be met in order to be eligible to be approved as a dual capital participant, including having been an ASX Clear Participant for at least three consecutive years.

## III. LIQUID CAPITAL

Liquid capital is the sum of:

1. "primary" capital, called core capital; and
2. "secondary" capital, which can include:
    a) cumulative preference shares;
    b) approved subordinated debt (up to a certain limit[1]); and
    c) revaluation reserves other than financial asset and liability revaluation reserves

less any illiquid assets or specified liabilities that must be excluded from capital in accordance with the requirements of the Rule.

Financial asset and liability revaluation reserves are revaluation reserves that relate to financial assets and liabilities revalued at fair value through other comprehensive income.

[1] No limit applies for a dual capital participant.

Core capital consists of the sum of:

a) all ordinary issued shares to the extent that those shares are paid-up;

b) all non cumulative preference shares;

c) all reserves, excluding revaluation reserves other than financial asset and liability revaluation reserves; and

d) opening retained profits/losses adjusted for all current year movements.

## IV. CORE REQUIREMENT

The core requirement for a Participant will be the sum of:

- a base requirement;
- an amount based on client written options clearing;
- an amount based on own account business; and
- an amount based on non-ASX client activity.

ASX Clear Direct Participants are subject to a base requirement of $5,000,000.

ASX Clear General Participants are subject to a base requirement which is determined by the number of Participants they clear for, as follows:

| General Participants – Base Requirement | | |
|---|---|---|
| Tier 1 | $5,000,000 | Clearing for itself or up to one External. |
| Tier 2 | $10,000,000 | Clearing for:<br>• itself and one External, or<br>• two Externals. |
| Tier 3 | $15,000,000 | Clearing for:<br>• itself and two Externals, or<br>• three Externals. |
| Tier 4 | $20,000,000 | Clearing for:<br>• itself and three or more Externals, or<br>• four or more Externals. |

*In this table "External" means another Participant or a Market Participant.*

For each of the abovementioned activity categories (client written options clearing, own account business and non-ASX client activity), the additional amount included in the calculation of the Participant's core requirement will be:

- nil if the activity is determined to be de minimis;
- $2,500,000 if the activity is determined not to be de minimis or material;
- $5,000,000 if the activity is determined to be material.

Participants will be assessed for each of these categories separately. If, for example, a Participant's activity in each of the three categories is deemed to be material, an additional amount of $15,000,000 will be included in the calculation of the Participant's core requirement.

## V. TOTAL RISK REQUIREMENT

The total risk requirement is the sum of risk amounts calculated under 6 separate risk categories:

(a) operational risk requirement;

(b) counterparty risk requirement;

(c) large exposure risk requirement;

(d) position risk requirement;

(e) underwriting risk requirement; and

(f) non-standard risk requirement.

Each component requires a calculation of various risk amounts and the manner in which these amounts are calculated are summarised below.

### 1. OPERATIONAL RISK REQUIREMENT

All Participants must calculate an operational risk requirement which is the sum of:

1. a fixed component of $100,000 that applies to all Participants;

2. a variable component equal to 8% of the sum of the:
   a) counterparty risk requirement;
   b) position risk requirement and;
   c) underwriting risk requirement.

3. A Secondary Requirement that is an additional amount that ASX Clear may impose on a Participant under its discretionary powers to cover a risk that may exist in a Participant that is not captured by Rule S1. Generally this would arise from significant operational control problems within the Participant.

## 2. COUNTERPARTY RISK REQUIREMENT

The counterparty risk requirement is the sum of risk amounts calculated under 6 different methods that apply depending on the type of counterparty exposures that a Participant may have. The counterparty risk amounts calculated can be reduced, at the option of the Participant, by:

a) securing client settlement prior to scheduled market settlement;

b) applying the rights given to Participants under the relevant Rules;

c) applying collateral under collateral agreements;

d) applying prescribed counterparty risk weights according to broad categories of counterparties.

The above are not mandatory. Participants can elect to apply the above reduction techniques, however certain criteria apply and Participants will need to have the requisite systems to automate the calculation.

Some restrictions apply in relation to which of the above techniques can be used to reduce the counterparty risk amount under the various methods.

### a) Non Margined Financial Instruments Method

This method is used to calculate the counterparty risk amount on agency securities transactions (for both equities and debt).

From trade execution ($T_0$) until client settlement or $T_{+10}$ (whichever comes first), the counterparty risk amount is for all clients the aggregate of:

**3% x client balance**

If a client has not settled a particular transaction with the Participant within 10 business days following execution, the counterparty risk amount will be the greater of:

**3% x contract value**

and

**the positive credit exposure**

where the positive credit exposure is the **loss** the Participant would incur if the client were to default. Positive credit exposure is the difference between the current market value of the securities underlying the transaction and the transaction contract value. If the "mark to market" difference represents a gain, for the purposes of calculating the counterparty risk amount, the positive credit exposure is zero.

Alternatively, a Participant can calculate the counterparty risk amount for a transaction where the client has not settled within 10 business days following execution as:

**100% x contract value (for a client purchase)**

**100% x market value (for a client sale)**

The client balance is the net of all buy and sell transactions arising from non margined financial instruments transacted with a particular client. Client balances cannot be netted across clients.

### b) Free Delivery Method

This method is used to calculate the counterparty risk amount on agency securities trades where all or part of the security (in the case of a purchase) or the proceeds (in the case of a sale) have been registered in the name of the client and / or transferred to the client prior to the client fully settling the transaction with the Participant. In such cases, the counterparty risk amount will be:

**8% x that part of the contract value subject to a free delivery**
(within 2 business days following transfer of securities/cash)

**100% x that part of the contract value subject to a free delivery**
(greater than 2 business days following transfer of securities/cash)

### c) Securities Lending and Borrowing Method

This method is used to calculate the counterparty risk amount on securities lending and borrowing ("SL&B") transactions that give rise to a counterparty exposure. A counterparty exposure is the amount by which the market value of Equity or Debt Instruments or cash given by the Participant to a counterparty exceeds the market value of Equity or Debt Instruments or cash received by the Participant from the counterparty (this market value difference is referred to as "CE").

Counterparty exposure may be calculated on a net basis where the relevant transactions are subject to a written agreement that supports netting across different transactions.

The requirement to calculate a counterparty risk amount on SL&B transactions only arises where the CE is positive and where the sum of all CE's on SL&B transactions across all counterparties is greater than $10,000.

Where the CE is less than 15% of the market value of Equity or Debt Instruments or cash received by the Participant from a counterparty, the counterparty risk amount will be:

**8% x CE**

Where the CE is greater than 15% of the market value of Equity or Debt Instruments or cash received by the Participant from a counterparty, the counterparty risk amount will be:

**8% x 15% of the market value of the Equity or Debt Instruments or cash received by the Participant from the Counterparty.**

**PLUS**

**100% of the amount of the difference between the CE and 15% of the market value of Equity or Debt Instruments or cash received by the Participant from the Counterparty.**

### d) Margined Financial Instruments Method

This method is used to calculate the counterparty risk amount on transactions that are margined by an exchange or clearing house. A counterparty risk amount must be calculated only if the counterparty fails to pay to the Participant the total value of the premium/deposit/margin requirement by the due time. If the counterparty fails to make that payment the counterparty risk amount will be 100% of the amount that the counterparty did not pay.

### e) OTC Derivatives and Warrants Executed as Principal Method

This method is used to calculate a Participant's counterparty risk amount arising from transactions in OTC derivatives entered as principal.

The counterparty risk amount is the sum of two values:

- the current credit exposure being the positive mark to market gain on the transaction (and zero if the mark to market difference is a loss); plus
- the potential credit exposure which is calculated as the notional position underlying the derivative transaction times a prescribed risk factor.

The risk factors vary depending on the type of underlying position (i.e., equity, interest rate, or foreign exchange) and on the term to maturity of the derivative transaction.

### f) Sub-underwritten Positions Method

This method is used to calculate the counterparty risk amount on exposures to parties that have sub-underwritten an IPO, sell down or other float from the Participant.

However, the actual methodology and requirement to hold capital against this exposure has not been introduced at this time.

## 3. LARGE EXPOSURE RISK REQUIREMENT

Additional capital must be held by Participants that have large counterparty exposures relative to their liquid capital and large exposures to particular issuers on principal positions in equity and debt securities relative to their liquid capital and relative to the market value of those securities on issue.

### a) Counterparty Large Exposure Risk Requirement

The requirement to hold additional capital against large counterparty exposures only arises if a client has not settled a transaction with a Participant after a prescribed period of time. For example, for agency securities transactions, the prescribed period is after $T_{+10}$.

If the counterparty risk amount as calculated under the counterparty risk requirement on a transaction that has remained outstanding for longer than the prescribed period is greater than 10% of the Participant's liquid capital, the Participant is required to calculate a counterparty large exposure risk amount. The risk amount will be:

**100% x the counterparty risk amount**

### b) Issuer Large Exposure Risk Requirement

The requirement to hold additional capital against a principal position in securities arises where the principal position is:

- greater than 25% of the Participant's liquid capital or

- for equities, greater than 5% of the market capitalisation of the listed entity and
- for debt securities, greater than 10% of the total value of the particular debt instrument on issue

If the above thresholds are exceeded, the additional capital required will be the value of the position that is in excess of the benchmark percentages times a prescribed position risk factor applicable to the position (refer to the position risk requirement section below).

## 4. POSITION RISK REQUIREMENT

The position risk requirement sets out several methods for calculating capital requirements on principal positions in equity, debt/interest rate based, foreign exchange and commodity positions. A Participant has the flexibility to choose those methods that best suits its operation and the available methods are described below.

There are two broad categories of methods available –

- Those methods detailed in points (a) to (d) below. These methods specify in detail the manner in which the risk requirement should be calculated and in general terms are suitable for Participants that do not undertake significant principal trading (with the exception of (c)).

- The method detailed in point (e) below. This method is less prescriptive than the methods noted above however as it involves a considerable investment in personnel and systems, it is generally only suitable for Participants that undertake significant principal trading.

A Participant may use "any" combination of methods, subject to certain conditions.

### a) Standard Method

Used by Participants that have relatively few principal positions in either equity, debt or foreign exchange instruments.

The risk amount is the sum of individual net positions in a particular security multiplied by a prescribed position risk factor.

The position risk factors for equities are either 12% or 16% depending on the index that the security is in.

The position risk factors for debt range from 0% to 20.5% depending on the maturity of the instrument and the issuer.

The position risk factor for foreign exchange is 8%.

### b) Building Block Method

Used by Participants that have a substantial principal trading book in either equity or debt instruments. For equities, this method can only be used if the Participant holds a minimum of either 5 long net positions or 5 short net positions. This criteria does not exist for debt positions.

The risk amount is the sum of two separate calculations:

- specific risk amount being the **sum of the absolute values** of individual net positions multiplied by a prescribed specific risk position risk factor; and
- general risk amount being the **net** of individual net positions multiplied by a prescribed general risk position risk factor.

The specific risk position risk factors for equities range from 2% to 8% depending on the composition of the overall equity portfolio and on the index that the security is in. The general risk position risk factor is 8%.

The specific risk position risk factors for debt range from 0% to 8% depending on the maturity of the position and the issuer of the underlying instrument. The general risk position risk factors range from 0% to 12.5% depending on the maturity of the position.

### c) Contingent Loss Matrix Method

Used by Participants that have significant options trading books in equities, debt/interest rates and foreign exchange.

The method involves the construction of a 7 by 3 matrix with each element of the matrix containing the gain or loss on an option portfolio resulting from revaluing the positions at market prices/rates and implied volatility adjusted by prescribed position risk factors. The position risk factors used are the same as those used under the Standard Method or Building Block Method as detailed above. The position risk amount will be the maximum loss from the matrix.

### d) Basic Method

Used by Participants that have long or short positions in equity or debt OTC or exchange traded options. The position risk amount for long options will be the lesser of:

**the market value of the option**

**and**

**the notional position underlying the option multiplied by the relevant standard method position risk factor.**

The position risk amount for short options will be:

**the notional position underlying the option multiplied by the relevant standard method position risk factor reduced by the amount by which the option is out of the money.**

### e) Internal Models Approach

The internal models approach allows Participants to use their own risk measurement systems to calculate the position risk requirement in addition to being used for internal risk management purposes. It is based on the use of value at risk techniques.

This approach is used by Participants that undertake significant principal trading activities and that have sophisticated risk measurement models in place. Use of the internal models approach requires a Participant to satisfy certain qualitative and quantitative criteria.

## 5. UNDERWRITING RISK REQUIREMENT

There is currently no underwriting risk requirement. The inclusion of the underwriting risk requirement is a future development for Rule S1.

## 6. NON-STANDARD RISK REQUIREMENT

The non-standard risk requirement is effectively a "catch all" provision that requires a Participant to calculate a risk amount on a transaction or some other exposure that is not explicitly covered by the other provisions of Rule S1. The risk amount is 100% of the value of the transaction or exposure unless approved otherwise. Participants are required to consult with Counterparty Risk Assessment to agree the appropriate treatment for the exposure and possibly a lower risk requirement.

## VI. PARTICIPANT IMPACT TABLE

The following Participant Impact Table provides an indication of the sections of Rule S1 that will impact on three broad categories of Participant. Participants in the "large" category would include those organisations that are significant principal traders. Participants in the "small" category would include those organisations that are purely agency equity brokers and have principal positions in one or two stocks. All other organisations would fall into the "medium" category.

| | | | Participant Size | | |
|---|---|---|---|---|---|
| | | | Small | Medium | Large |
| Liquid Capital | | | ✓ | ✓ | ✓ |
| Total Risk Requirement | | | | | |
| **a)** | Operational risk requirement | | | | |
| | i) | Fixed Component | ✓ | ✓ | ✓ |
| | ii) | Variable Component | ⚑ | ⚑ | ⚑ |
| | iii) | Secondary Requirement | ✗ | ✗ | ✗ |
| **b)** | Counterparty Risk Requirement | | | | |
| | i) | Non Margined | ⚑ | ⚑ | ⚑ |
| | ii) | Free Delivery | ? | ? | ? |
| | iii) | Securities Lending | ? | ⚑ | ⚑ |
| | iv) | Margined | ? | ? | ⚑ |
| | v) | OTC Derivatives | ✗ | ✗ | ? |
| | vi) | Sub Underwritten | **n/a** | **n/a** | **n/a** |
| **c)** | Large Exposure Risk Requirement | | | | |
| | i) | Counterparty Large | ✗ | ✗ | ? |
| | ii) | Issuer Large | ? | ? | ? |
| **d)** | Position Risk Requirement | | | | |
| | i) | Standard | ? | ? | ? |
| | ii) | Building Block | ✗ | ? | ⚑ |
| | iii) | Contingent Loss Matrix | ✗ | ✗ | ? |
| | iv) | Basic | ✗ | ? | ✗ |
| | v) | Internal Models Approach | ✗ | ✗ | ? |
| e) | Underwriting Risk Requirement | | **n/a** | **n/a** | **n/a** |
| f) | Non-standard Risk Requirement | | ✗ | ✗ | ? |

✓ = Mandatory ✗ = Unlikely ⚑ = Likely ?= Possible

## VII. COUNTERPARTY RISK ASSESSMENT CONTACTS

Should you have any queries in relation to the Risk Based Capital Requirements please use the following contact details to contact Counterparty Risk Assessment.

Email: CRAteam@asx.com.au
Phone: 1800 636 850